



FALL VIRTUAL CONFERENCE



S1.4: Mask Filtration Efficiency – a New Perspective

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BIO

Dr. Khalek is a world expert in the area of particle emissions from combustion sources and exhaust particle filters for diesel, gasoline and natural gas engines. He has a strong educational training and substantial research & publications record in the field of engine emissions. He has a BS in Aerospace Engineering and MS/PhD in Mechanical Engineering all from the University of Minnesota. In 1999, he joined Southwest Research Institute (SwRI) as Research Engineer and he is currently Sr. Program Manager overseeing particle emissions activities at SwRI. He is the founder of the Particle Science & Technology (PST) Laboratory that recently became the only ISO 17025 A2LA accredited particle instruments calibration laboratory in the USA. Dr. Khalek interest includes engine, aftertreatment, battery, brake and tires emissions, particle instrument development and calibration, spark-plug sized sensors, and recently masks R&D.

During the height of COVID-19 pandemic, Dr. Khalek quickly converted part of the PST laboratory to offer respirator and surgical masks filtration efficiency and pressure drop services using alternative approaches to standardized testing with more flexibility in R&D and quick turnaround for US manufacturers, hospitals and other organizations.